### THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 16

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

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Ex parte ADIEL ABILEAH

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Appeal No. 96-0871 Application  $08/177,858^{1}$ 

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HEARD: FEBRUARY 10, 1999

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Before BARRETT, FLEMING and DIXON, Administrative Patent Judges.

FLEMING, Administrative Patent Judge.

## DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1 and 3 through 7. Claims 12 and 13 have been allowed

<sup>&</sup>lt;sup>1</sup> Application for patent filed January 5, 1994. According to appellant, the application is a continuation-in-part of Application 08/031,120, filed March 12, 1993, now abandoned.

by the Examiner. Claims 2 and 8 through 11 have been canceled.

The invention relates to backlit liquid crystal display devices (LCDs) having a first light source for operation during the day, and a separate and independent second light source for operation at night. On page 42 of the specification, Appellant discloses that Figure 10 illustrates the proper positioning of an integral imagesplitting/collimating lens 302, an EL night lamp 398 and a serpentine daytime lamp 300. In particular, on pages 43 and 44 of the specification, Appellant discloses that the spacing between the parallel daytime light sources 300 is an important parameter to the achievement of substantially uniform light from either the daytime light sources 300 or the EL night lamp 398. Appellant discloses that by manufacturing the backlighting system so that the inner diameter of the daytime sources 300, "D $_{\!\scriptscriptstyle \rm I}$ ", is equal to the gap, "T", between the inner peripheries of adjacent daytime light sources, the backlighting from either the daytime light sources 300 or the EL night lamp 398 results in substantially uniform

illumination produced by the integral imagesplitting/collimating lens 302.

The independent claim 1 is reproduced and is appended to this decision.

The Examiner relies on the following references:

Abileah et al. (Abileah) 5,161,041 Nov. 3, 1992
Farrell 5,143,433 Sept. 1, 1992
Military Standard MIL-L-85762A Aug. 26, 1988

Claims 1 and 7 stand rejected under 35 U.S.C. § 103 as being unpatentable over Abileah in view of Farrell. Claims 3 through 6 stand rejected under 35 U.S.C. § 103 as being unpatentable over Abileah in view of Farrell and Military Standard MIL-L-85762A.

Rather than reiterate the arguments of Appellant and the Examiner, reference is made to the briefs<sup>2</sup> and answers<sup>3</sup> for the

<sup>&</sup>lt;sup>2</sup> Appellant filed an appeal brief on February 13, 1995. We will refer to this appeal brief as simply the brief. Appellants filed a reply appeal brief on July 31, 1995. The Examiner responded to the reply brief with a supplemental Examiner's answer thereby entering and considering the reply brief.

<sup>&</sup>lt;sup>3</sup> The Examiner responded to the brief with an Examiner's answer, mailed June 1, 1995. We will refer to the Examiner's answer as simply the answer. The Examiner responded to the reply brief with supplemental Examiner's answer mailed

respective details thereof.

### **OPINION**

We will not sustain the rejection of claims 1 and 3 through 7 under 35 U.S.C. § 103.

The Examiner has failed to set forth a prima facie case. It is the burden of the Examiner to establish why one having ordinary skill in the art would have been led to the claimed invention by the express teachings or suggestions found in the prior art, or by implications contained in such teachings or suggestions. In re Sernaker, 702 F.2d 989, 995, 217 USPQ 1, 6 (Fed. Cir. 1983). "Additionally, when determining obviousness, the claimed invention should be considered as a whole; there is no legally recognizable 'heart' of the invention." Para-Ordnance Mfg., Inc. v. SGS Importers Int'l, Inc., 73 F.3d 1085, 1087, 37 USPQ2d 1237, 1239 (Fed. Cir. 1995), cert. denied, 117 S.Ct. 80 (1996) citing W. L. Gore & Assocs., Inc. v. Garlock, Inc., 721 F.2d 1540, 1548, 220 USPQ 303, 309 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

Appellant argues on pages 6-8 of the brief that neither

September 13, 1995.

Abileah nor Farrell teach or suggest Appellants' unique lighting element spacing that ensures uniform and non-saturating lighting during nighttime activities. Appellant's independent claim 1 sets forth "two spaced apart light emitting members each having an inner diameter defining an inner periphery and an outer diameter defining an outer periphery thereof, wherein said gap is defined as the distance between said inner peripheries of said two spaced apart light emitting members, said gap being of substantially the same width as each of said inner diameters of said spaced apart light emitting members." Appellant argues that nowhere is it taught or suggested to modify Abileah to space the light emitting members of the first or daytime source a distance T apart where gap T is substantially equal to the inner diameter distance of each of the first source light emitting members.

The Federal Circuit states that "[t]he mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." *In* re Fritch, 972 F.2d 1260, 1266 n.14, 23 USPQ2d 1780, 1783-84

n.14 (Fed. Cir. 1992), citing In re Gordon, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984).

Upon a closer review of Abileah, we agree with the Examiner that Abileah fails to teach second light source. Furthermore, we fail to find that Abileah teaches or suggests the spacing of the first light source members such that the gap defined between the inner peripheries of two spaced apart first light source members a distance that is substantially the same as the inner diameters of the first light source members. In particular, we find that Abileah is silent to this spacing in the specification. We further note that Abileah does show the spacings in Figures 2A and 7 and these spacings are much greater than Appellant's claimed spacings.

Turning to Farrell, we fail to find that Farrell teaches or suggests the spacing of the first light source members such that the gap defined between the inner peripheries of two spaced apart first light source members a distance that is substantially the same as the inner diameters of the first light source members. As with Abileah, Farrell is silent as

to this spacing in the specification. However, when Farrell illustrates the spacing in the drawing, Farrell shows the spacings that spacings are much greater than Appellant's claimed spacings. See Farrell's Figures 1, 2, 8 and 9.

The Examiner has failed to show that the prior art suggested the desirability of the Examiner's proposed modification. We are not inclined to dispense with proof by evidence when the proposition at issue is not supported by a teaching in a prior art reference or shown to be common knowledge of unquestionable demonstration. Our reviewing court requires this evidence in order to establish a prima facie case. In re Knapp-Monarch Co., 296 F.2d 230, 232, 132 USPQ 6, 8 (CCPA 1961); In re Cofer, 354 F.2d 664, 668, 148 USPQ 268, 271-72 (CCPA 1966). Therefore, we find that the Examiner has failed to establish why one having ordinary skill in the art would have been led to the claimed invention by teachings or suggestions found in the prior art.

We have not sustained the rejection of claims 1 and 3 through 7 under 35 U.S.C. § 103. Accordingly, the Examiner's decision is reversed.

# REVERSED

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LEE E. BARRETT )

Administrative Patent Judge )

MICHAEL R. FLEMING )

Administrative Patent Judge )

JOSEPH L. DIXON )

Administrative Patent Judge )

Administrative Patent Judge )
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MRF/ki

1. In a liquid crystal display which includes a matrix array of rows and columns of liquid crystal picture elements, said matrix array having a viewing side and a rear side, and wherein said display further includes means for generating light to be passed through said matrix array which includes a first light source and a second light source, said first and second light sources being located rearward of said rear side of said matrix array thereby to create a pair of backlit light sources for said array, said means for generating light further including means for selecting from which light source said light shall be emitted, the improvement comprising:

as said first light source, at least two, spaced apart light emitting members of substantially the same size so as to define a gap therebetween, said two spaced apart light emitting members each having an inner diameter defining an inner periphery and an outer diameter defining an outer periphery thereof, wherein said gap is defined as the distance between said inner peripheries of said two spaced apart light emitting members, said gap being of substantially the same width as each of said inner diameters of said spaced apart light emitting as each of said inner diameters of said spaced apart

wherein said second light source is located rearward of said first light source with respect to said matrix array, and is further so located with respect to said

### APPENDIX

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first light source such that a substantial portion of the light emitted from said second light source directly projects into and through said gap between the inner peripheries of said two spaced apart light emitting members of said first light source;

and wherein said display further includes imagesplitting means for providing two, similar images of one
of said first and second light sources when said one
light source emits light therefrom, said image-splitting
means being located between said matrix array and said
light sources and being spaced from said light sources
such that when said first light source emits light the
split, similar images thereof formed by said imagesplitting means are cojoined to create a substantially
uniform generation of light for impingement upon the rear
side of the matrix array, and such that when said second
light source emits light, the split-images thereof formed
by said image-splitting means are cojoined to create a
substantially uniform generation of light for impingement
substantially uniform generation of light for impingement

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